

lated and experimentally produced cardiac lesions. This unquestionably reduces the value of the atlas to the clinical physiologists who might be interested in presentation of the normal, abnormal and unusual tracings obtained from patients (the relationship between clinical and experimental lesions is uncertain, to say the least). A clinician reading the book might easily get lost in the physiological discussion presented unsystematically in relation to a given example. The book contains many excellent illustrations and instructive comments, but is disappointing as a whole, perhaps by its unusual objectives and structure. The clinician may prefer a simpler but more systematic presentation of circulatory dynamics; the clinical physiologist an atlas to enrich his clinical experience.

ARTHUR SELZER, M.D.

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BIRTH DEFECTS—Edited by Morris Fishbein, M.D. J. B. Lippincott Company, East Washington Square, Philadelphia 5, Pa., 1963. 335 pages, \$5.00.

This is the first edition of a compendium of views and advice on birth defects. Dr. Fishbein has assembled articles by thirty authorities dealing with practically all aspects of the subject. The history, social philosophy, cause, prevention and treatment of birth defects are dealt with. Specific defects such as harelip and cleft palate, heart malformations, club foot and other bony defects, hydrocephalus and spina bifides, fibrocystic disease and mental retardation are each discussed in separate chapters.

While the volume is welcomed in the preface as filling the needs of parents and laymen who face the problem of birth defects from personal experience with it, is is not directed primarily at the laymen in the opinion of this reviewer. Chapters on cell structure, cell differentiation, DNA and RNA synthesis, chromosome aberrations and in-born errors of metabolism are technical in nature and clearly intended for physicians, especially those dealing with children and parents of children who have a developmental defect. Such individuals will find the book stimulating and designed to be of practical usefulness in their work.

WILLIAM C. DEAMER, M.D.

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THE PSYCHOLOGY OF MEANINGFUL VERBAL LEARNING—An Introduction to School Learning—David P. Ausubel, Bureau of Educational Research, University of Illinois. Grune & Stratton, Inc., 381 Park Avenue South, New York 16, N. Y., 1963. 255 pages, \$6.50.

Dr. Ausubel has approached the task of assessing the psychology of meaningful verbal learning with the same scholarly thoroughness which he has previously demonstrated in his texts on the theory and problems of child and adolescent development. His new book is concerned with "reception learning" and he has organized his material in such a manner that the book itself is an example of his major hypothesis—namely that learning and retention are facilitated when the learner has a meaningful cognitive framework within which to organize and assimilate new material. This framework is provided the reader by an extensive introduction, overview and summary which precedes the main body of the text. Once Ausubel has oriented his reader he systematically reviews and evaluates existing literature in the field of human learning and elaborates his position. His broad and comprehensive statements relating to the existing knowledge in this field will be particularly useful to educators, psychologists, and physicians who are desirous of re-acquainting themselves with the basic principles of learning. Ausubel's approach in this book, while somewhat repetitious, seems to accomplish his aim. Educators faced with the problem of presenting students with an increasing number of complex and abstract learning tasks in an enlighten-

ment-conscious age will be interested in Ausubel's contention that learning by "discovery" and "empirical experience" is not necessarily more effective than meaningful "reception learning."

FRANK M. HEWETT, Ph.D.

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ORTHOPEDIC DISEASES—Physiology, Pathology, Radiology, Second Edition—Ernest Aegerter, M.D., Professor of Pathology and Director of Pathology, Temple University Medical Center and School of Medicine; Professor of Orthopedic Pathology, University of Pennsylvania Graduate School of Medicine; and John A. Kirkpatrick, Jr., M.D., Radiologist, St. Christopher's Hospital for Children; Associate Professor of Radiology (Pediatrics), Temple University School of Medicine. W. B. Saunders Company, West Washington Square, Philadelphia 5, Pa., 1963. 786 pages, illustrated, \$16.00.

The Second Edition remains well organized with improvement in the x-ray demonstration of bone lesions. The bone tumor classification is up to date and clearly presented.

Some sections seem overly brief. However, the nature of this text is to survey the physiology, pathology and radiology of orthopedic diseases, rather than to be a source book. It is an excellent text to use in review for Board examinations.

The sections on chondrodysplasias and metabolic bone diseases are particularly well done.

BENJAMIN H. MAECK, M.D.

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GENETICS OF MIGRANT AND ISOLATE POPULATIONS—Proceedings of a Conference on Human Population Genetics in Israel Held at the Hebrew University, Jerusalem. Edited by Elisabeth Goldschmidt, Department of Zoology, Hebrew University. Published for the Association for the Aid of Crippled Children by The Williams & Wilkins Company. The Williams & Wilkins Company, Baltimore 2, Maryland, exclusive U. S. agents, 1963. 369 pages, \$9.00.

This is an excellent book and a very valuable one for anyone who desires to obtain an overall picture of the genetics of the Jewish populations. The data are presented very succinctly and clearly by outstanding individuals in the various fields that are covered.

The presentations dealing with blood groups, hemoglobinopathies, and G6PD deficiency are particularly illuminating and interesting. Genetic information of real importance is to be found also on such things as consanguinity in Japanese, acatalasemia and amyotrophic lateral sclerosis. The inclusion of the Exhibit Section on the Genetics of Israel's Populations enhances the value of the book a great deal.

JOHN S. LAWRENCE, M.D.

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AN ATLAS OF ULTRASTRUCTURE—Johannes A. G. Rhodin, M.D., Professor of Anatomy, New York University School of Medicine, New York City; Docent of Anatomy, Karolinska Institutet, Stockholm, Sweden. W. B. Saunders Company, West Washington Square, Philadelphia 5, Pa., 1963. 222 pages, \$10.00.

This is a superb Atlas. The pictures are excellent and the descriptions of them are very clear and complete. The author states that his aim was to "bridge the gap" between light microscopy and electron microscopy. He appears to the reviewer to have done this very well. There is not total coverage of the mammalian body but few tissues fail to appear in the atlas. Some, of course, are covered more completely than others. The bibliography is very extensive. This Atlas will serve as a very authoritative source for pictures of the ultra structure of cells and for references to original publications in this field.

JOHN S. LAWRENCE, M.D.